

L2CAL Trigger Status Report

Bad DCAS bits

The most recent list of bad bits I got from Carla is:

η	ϕ	Bit	Status	ΔE
2	22	EM(5)	OFF	-2 GeV
2	5	EM(7)	OFF	-8 GeV
11	5	HAD(0)	OFF	-0.125 GeV
16	19	HAD(0)	ON/OFF	+/-0.125 GeV
21	0	HAD(1)	OFF	-0.25 GeV

Hardware

DCAS BACKPLANES

NEW energy error for $(\eta, \phi) = (6, 0)$...seen in TRIGMON but cannot track it down with my validation code yet..

OLD bad connection on b0l2cl01 backplane for EM(5) around $(\eta, \phi) = (23, 9)$ causes a loss of 2 GeV in EM energy for very high eta clusters.

I asked Bob De Maat to stuff 2 L2CAL backplanes from newest production run (no changes to PCB, only stricter hole tolerances).

We can maybe try to swap one into b0l2cl01 during the next Tevatron study period and keep one as spare?

Software / Firmware

Stable for the last 6 months.

We know we will need to optimize **CLIST firmware** at some point to pass 2 clusters per MB transaction...not urgent. Maybe it will be work on when PULSAR available.

TRIGSIM/TRIGMON

- Remaining problems in TRIGSIM DCAS simulation fixed (predicted tower usage words now agree).
- Access to Trigger Database still needs to be implemented before making it a standard tool.
- TRIGMON will have to implement database access before we can add some DCAS validation plots (and completely replace my private validation job).